TRANSLATION OF ANNEXES

New description pages

complete postage checking cycle, which comes at the expense of the conveying speed of all of the mailpieces.

Moreover, international patent application WO 02/0822235 describes a system for processing goods that are sent back to a merchant by customers. Here, first of all, an image of the surface of the packages containing the goods as well as their weight are acquired and stored in a database. On the basis of this data, the postage to be paid is calculated and compared to the postage that has been applied to the packages in order to draw up reports indicating the amount of postage that still has to be paid by the merchant. In order to draw up suitable groupings of images for the processing, a sorting of the images can be carried out.

Summary of the invention

The invention is based on the objective of refining a method of the generic type in such a way that mailpieces of a sorting process are processed in a mail distribution center or in several mail distribution centers, whereby the sorting processes are optimized on the basis of a processing result without this causing any delay. In this manner, cases of fraud, for example, due to forged postage indicia, are eliminated and all kinds of fraud patterns are recognized.

This objective is achieved according to the invention with a method of the generic type in that, on the basis of a first result of the evaluation of the graphic information, a database is augmented by additional sorting features, whereby the surface video data

contained in the graphic information and/or the statistical evaluation are imaged, and whereby moreover, using the augmented database, a second result of the evaluation is ascertained so that, on the basis of the results of the evaluation, the graphic information of a first mailpiece is sorted, whereby this sorting of the graphic information of the first mailpiece triggers a physical sorting of a second mailpiece, and furthermore, in that another physical sorting of the first mailpiece resulting from a reference code is carried out.

In particular, the method is suitable for the evaluation of graphic information in mail or freight centers.

New Claims:

1. A method for processing graphic information present on mailpieces, whereby the graphic information is acquired, evaluated and stored, and whereby the acquired graphic information is used for physically sorting mailpieces,

characterized in that,

on the basis of a first result of the evaluation of the graphic information, a database is augmented by additional sorting features, whereby the surface video data contained in the graphic information and/or the statistical evaluation are stored, and whereby moreover, on the basis of the augmented database, a second result of the evaluation is ascertained so that, on the basis of the results of the evaluation, the graphic information of a first mailpiece is sorted, whereby this sorting of the graphic information of the first mailpiece triggers a physical sorting of a second mailpiece, and furthermore, in that another physical sorting of the first mailpiece resulting from a reference code is carried out.

2. The method according to claim 1,

characterized in that

a determination of postage indicia present on the mailpieces is carried out.

3. The method according to one or more of the preceding claims,

characterized in that

the evaluation of the graphic information takes place via a data line at a different point in time and/or at a different place than the point in time and/or the place of the physical sorting resulting from the reference code.

4. The method according to one or more of the preceding claims,

characterized in that

the evaluation of the graphic information of the mailpieces comprises a statistical evaluation of the graphic information present on the mailpieces.

5. The method according to one or more of the preceding claims,

characterized in that

the authenticity of sender franking is verified in that the graphic information present on the mailpieces is compared to the information expected for this mailpiece, whereby the expected information corresponds to a determination that preceded the comparison, and moreover, the postage indicium is registered as being forged if the information at hand differs from the expected information.

6. The method according to one or more of the preceding claims,

characterized in that

the authenticity of a digital postage indicium is verified, whereby the encoded digital information contained in the graphic information is deciphered and compared to the unencrypted graphic information present on the appertaining mailpiece to see if it matches and, if it does not match, the postage indicium is registered as being forged.

7. The method according to claim 6,

characterized in that

a hash value is generated from data contained in the graphic information in order to check whether this hash value matches a hash value contained in the encoded information and, if it does not match, the postage indicium is registered as being forged.

8. The method according to claim 7,

characterized in that

the hash value is formed taking into account information about mailpiece data, taking into account a temporarily stored random number and taking into account a loading procedure identification number.

9. The method according to one or more of the preceding claims,

characterized in that

the evaluation of the graphic information of the mailpiece is carried out according to sorting features.

10. The method according to one or more of the preceding claims,

characterized in that

the time of day of a sorting event is a sorting feature of the evaluation.

11. The method according to one or more of the preceding claims,

characterized in that

another sorting feature of the evaluation is the date of a sorting event.

12. The method according to one or more of the preceding claims,

characterized in that

another sorting feature of the evaluation is the starting time and/or the ending time of a sorting event.

13. The method according to one or more of the preceding claims,

characterized in that

another sorting feature of the evaluation is the specification of production machines in a mail or freight distribution center.

14. The method according to one or more of the preceding claims,

characterized in that

another sorting feature is the value of the insufficient postage determined by means of the evaluation.

15. The method according to one or more of the preceding claims,

characterized in that

another sorting feature is the AFM identification determined by means of the evaluation.

16. The method according to claim 15,

characterized in that

as another sorting feature, it is checked whether the AFM identification is readable.

17. The method according to one or more of the preceding claims,

characterized in that

as another sorting feature, it is checked whether the determined AFM identification is present in a negative file.

18. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether the determined AFM identification is present in a positive file.

19. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether this is a case of AFM insufficient postage.

20. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether the AFM currency is readable.

21. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether the AFM postage indicium is readable.

22. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, the date of a PCF ("PCF date") is checked.

23. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether a PCF version ("PCF version") is present.

24. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether PCF insufficient postage ("PCF insufficient postage") is present.

25. The method according to one or more of the preceding claims, characterized in that

as another sorting feature, it is checked whether a determined PCF is present in a negative file ("PCF in negative file").

26. The method according to one or more of the preceding claims, characterized in that

data of the automated checking of the postage is stored.

27. The method according to one or more of the preceding claims, characterized in that

results of the evaluation of graphic information are stored in a database.

28. A device for processing graphic information present on the surfaces of mail-pieces comprising one or more image processing units, whereby the image processing units have means for acquiring, evaluating and storing the graphic information of mailpieces, and having at least one means for recognizing different types of postage of the mailpieces, whereby the image processing units as well as the means for recognizing the types of postage are in a data network,

characterized in that

the data network is connected to at least one means for performing a physical sorting of mailpieces, at least one means for generating a reference code, and at least one means for evaluating the graphic information, so that the means for evaluating the graphic information of a first mailpiece ascertains a first result of the evaluation, whereby the data network is also connected to a database that has been augmented by an additional sorting feature on the basis of the first result of the evaluation of the graphic information, for determining a second result of the evaluation and additionally, at least one means for performing the physical sorting of a second mailpiece is activated, whereby another physical sorting of the first mailpiece is carried out on the basis of the reference code.

29. The device according to claim 28,

characterized in that

at least one means for evaluating the graphic information of the mailpieces is located inside and/or outside of a mail distribution center.

30. The device according to one or both of claims 28 and 29,

characterized in that

at least one means for evaluating the graphic information of the mailpieces has at least one input device as well as at least one display device so that evaluation results as well as surface video data of the mailpieces are displayed to a user and edited by the user employing the input device.

31. The device according to claim 30,

characterized in that

conventional analog and/or digital video equipment is used as display devices.

32. The device according to one or both of the preceding claims 30 or 31,

characterized in that

PC-based display devices are used that allow a filtering of the video data and thus a detailed depiction of specific segments of the video data.

33. The device according to claim 30,

characterized in that

the input devices consist of PC keyboards, numerical keypads, barcode scanners and/or means for speech recognition.